

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

42
MAIL ROOM
SEP
23
1996
PAT. & TRADEMARK OFF.

Applicant: Amr R. Mohsen
 Assignee: Aptix Corporation
 Title: FIELD PROGRAMMABLE PRINTED CIRCUIT BOARD
 Serial No.: 08/632,298 Filed: April 12, 1996
 Examiner: Unknown Group Art Unit: Unknown
 Attorney Docket No.: M-1007-6C US

San Jose, California
 September 20, 1996

RECEIVED

COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D. C. 20231

SEP 25 1996

GROUP 2300

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the documents listed on the accompanying substitute PTO Form 1449 are called to the attention of the PTO in regard to the above patent application. Copies of these documents are enclosed.

All of these documents were cited in parent U.S. patent application, Ser. No. 08/171,992.

Certain of these documents were cited in the European search report for European patent application EP 90310252 corresponding to grandparent U.S. patent application Ser. No. 07/410,194. Certain of these documents were cited in the PCT search report for PCT international patent application PCT/US92/08115 corresponding to U.S. patent application 07/764,263, a continuation-in-part of the grandparent application. Copies of these search reports are enclosed.

Citation of the above documents shall not be construed as an admission that the documents are necessarily prior art with respect to the present invention. Nor shall citation of these documents be construed as a representation that a search has been made, other than as described above. Also, citation of

the above documents shall not be construed as an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 CFR 1.56(b).

Respectfully submitted,

Ronald J. Meetin

Ronald J. Meetin
Attorney for Applicants
Reg. No. 29,089

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C., 20231, on September 20, 1996

20 September 1996

Ronald J. Meetin

Date of Signature

Attorney for Applicant(s)

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C US	08/632,298
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use several sheets if necessary)</i>		Applicant	
<i>MAIL ROOM SEP 15 1996 42 U.S.P.T.O. PAT. & TRADEMARKS</i>		Amr M. Mohsen	
		Filing Date	Group
		04/12/96	Unknown

U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,124,899	11/1978	Birkner et al			
	AB	4,146,902	3/1979	Tanimoto et al			RECEIVED
	AC	4,241,307	12/1980	Hong			SEP 25 1996
	AD	4,245,273	1/1981	Feinberg			
	AE	4,327,355	4/1982	Genter et al			GROUP 2300
	AF	4,354,228	10/1982	Moore et al			
	AG	4,433,331	2/1984	Kollaritsch			
	AH	4,441,075	4/1984	McMahon			
	AI	4,455,495	6/1984	Masuhara et al			
	AJ	4,458,297	7/1984	Stopper et al			
	AK	4,467,400	8/1984	Stopper			

Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL	177,261 A2	5/1986	EPO				
	AM	204,034 A2	12/1986	EPO				
	AN	310,357 A3	4/1989	EPO				
	AO	329,018 A3	8/1989	EPO				
	AP	59-161839	9/1984	Japan				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Bogdan, "An Electrically Programmable Silicon Circuit Board", 1987, pp. 472-476.
	AS	Donnell, "Crosspoint Switch: APLD Approach," <u>Digital Design</u> , July 1986, pp. 40-42, 44.
	AT	Fiduccia et al, "A Linear-Time Heuristic for Improving Network Partitions," 19th ACM/IEEE Design Automation Conf., June 14-16, 1982, pp. 175-181, reprinted in <u>Comp. Paps. Design Automation Conf.</u> , 1988, pp. 241-247.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C US	08/632,298
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant	
(Use several sheets if necessary)		Amr M. Mohsen	
		42 SEP 23 1996	Filing Date
			Group
		04/12/96	Unknown
U.S. Patent Documents			

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,479,088	10/1984	Stopper			RECEIVED
	AB	4,486,705	12/1984	Stopper			SEP 25 1996
	AC	4,509,008	4/1985	Das Gupta et al			
	AD	4,631,686	12/1986	Ikawa et al			GROUP 2300
	AE	4,638,246	1/1987	Blank et al			
	AF	4,649,413	3/1987	Kelly			
	AG	4,703,436	10/1987	Varshney			
	AH	4,706,216	11/1987	Carter			
	AI	4,717,988	1/1988	Landis			
	AJ	4,727,268	2/1988	Hori			
	AK	4,749,947	6/1988	Gheewala			

Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL	WO 85/03804	8/1985	PCT				
	AM	WO 90/04233	4/1990	PCT				
	AN							
	AO							
	AP							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Hantusch, "The PIM: A Programmable Interconnection Module", <u>IEE Colloquim Dig.</u> , Colloquim on IC Design-Gate Arrays, 21 November 1984, pp. 8.1 - 8.4.
	AS	Hyden et al, "Silicon Circuit Boards: Off-the-Shelf Convenience," <u>Elect. Pack. & Prod.</u> , Apr. 1988, pp. 70-74.
	AT	Lauther, "A Min-Cut Placement Algorithm for General Cell Assemblies Based on a Graph Representation," 16th Design Automation Conf., June 25-27, 1979, pp. 1-10, reprinted in <u>Comp. Paps. Design Automation Conf.</u> , 1988, pp. 182-191.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C	08/632,298
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant	
		Amr M. Mohsen	
		Filing Date	Group
		04/12/96	Unknown

U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,758,745	7/1988	Elgamal et al			
	AB	4,779,340	10/1988	Kihm et al			RECEIVED
	AC	4,786,904	11/1988	Graham et al			SEP 25 1996
	AD	4,813,017	3/1989	Wong			
	AE	4,817,093	3/1989	Jacobs			GROUP 2300
	AF	4,821,176	6/1990	Ward et al			
	AG	4,826,776	5/1989	Brandt et al			
	AH	4,833,402	5/1989	Boegh-Petersen			
	AI	4,840,924	6/1989	Kinbara			
	AJ	4,847,732	7/1989	Stopper et al			
	AK	4,860,165	8/1989	Cassinelli			

Foreign Patent Documents

						Translation		
		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							
	AD							
	AP							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Lee et al, "A New Global Router for Row-Based Layout," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 180-183.
	AS	Lin et al, "A Detailed Router Based on Simulated Evolution," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 180-183.
	AT	Marek-Sadowska, "Two Dimensional Router for Double Layer Layout," 22nd ACM/IEEE Design Automation Conf., June 23-26, 1985, pp. 117-123.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C	08/632,298
INFORMATION DISCLOSURE STATEMENT BY TRADEMARK OFFICE		Applicant	
(Use several sheets if necessary)		Amr M. Mohsen	
		Filing Date	Group
		04/12/96	Unknown

U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,866,432	9/1989	Goetting			
	AB	4,870,302	9/1989	Freeman			
	AC	4,873,459	10/1989	El Gamal			
	AD	4,877,599	10/1989	Lees			
	AE	4,884,122	11/1989	Eichelberger et al			
	AF	4,894,605	1/1990	Ringleb et al			
	AG	4,906,987	3/1990	Venaleck			
	AH	4,949,084	8/1990	Schwartz et al			
	AI	5,015,885	5/1991	El Gamal			
	AJ	5,036,473	7/1991	Butts et al			
	AK	5,107,146	4/1992	El-Ayat			

Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Swager, "Crosspoint-switch ICs Enter Digital Domain", <u>Technology Update, EDN</u> , pp. 76 - 86, February 16, 1989.
	AS	Tzeng et al, "Codar: A Congestion-Directed General Area Router," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 30-33.
	AT	Wooley et al, "Active Substrate System Integration", IEEE, July 1987, pp. 468-471.

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C	08/632,298
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant	
(Use several sheets if necessary)		Amr M. Mohsen	
		Filing Date	Group
		04/12/96	Unknown



U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA		5,109,353	4/1992	Sample et al			
AB		5,231,588	7/1993	Agrawal et al			
AC		5,253,181	10/1993	Marui et al			
AD		5,255,203	10/1993	Agrawal et al			
AE		5,295,082	3/1994	Chang et al			
AF							
AG							
AH							
AI							
AJ							
AK							

Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							
	AD							
	AP							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	HP-12C Owner's Handbook and Problem Solving Guide, Hewlett-Packard Company, Palo Alto, CA, 1981, pp. 220-221.
	AS	IBM Tech. Discl. Bul., "Logically Controlled Chip Interconnection Technique," Aug. 1989, vol. 32, no. 3B, pp. 294-299.
	AT	

Examiner	Date Considered
----------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.